GOVERNMENT OF INDIA
HEAVY INDUSTRIES AND PUBLIC ENTERPRISES
LOK SABHA

UNSTARRED QUESTION NO:885
ANSWERED ON:23.10.2008
SETTING UP OF POWER PLANT BY BHEL
Chakrabortty Shri Swadesh

Will the Minister of HEAVY INDUSTRIES AND PUBLIC ENTERPRISES be pleased to state:

(a) whether Bharat Heavy Electricals Limited (BHEL) has entered into an agreement with Andhra Pradesh Power Generation Corporation to set up a 125 MW power plant using IGCC (Integrated Gasification Combined Cycl

(e) technology;

(b) if so, whether IGCC technology is more thermal efficient and cost effective than conventional pulverized coal technology; and

(c) if so, the comparative figures thereof?

Answer

MINISTER OF STATE IN THE MINISTRY OF HEAVY INDUSTRIES AND PUBLIC ENTERPRISES (SHRI RAGHUNATH JHA)

(a) Yes Sir, Bharat Heavy Electricals Limited (BHEL) has signed a Memorandum of Understanding with Andhra Pradesh Power Generation Corporation (APGENCO) to set up a 125 MW IGCC (Integrated Gasification Combined Cycle) based Theremal Power Plant at Vijaywada.

(b) IGCC technology has a higher thermal efficiency vis-a-vis conventional pulverized coal technology as it is based on the principle of Combined Cycle operation viz. the gas turbine cycle and the steam turbine cycle, which produces electric power more efficiently and with lower emissions.

The initial capital cost of an IGCC power plant is generally higher world-wide compared to a conventional thermal power plant. However, the cost of IGCC technology developed by BHEL over 25 years for high ash Indian coal is lower than that of developed countries including USA. The technology developed by other countries is suitable for low ash coal.

(c) IGCC is a futuristic clean coal technology which is inherently less polluting compared to other coal based power generation technologies and has substantial environmental benefits like reduction in air pollution reduced water consumption and reduced solid waste production while also utilizing less coal. The parameters of pollution, consumption and solid waste depend upon the quality of coal used. Since the first IGCC based thermal power plant is yet to be set up at Vijayawada by BHEL in cooperation with APGENCO, comparative figures are not available.